

GoedelWorks™

A Unified and Systematic Environment for Certifiable Trustworthy Software and Systems Engineering



Embedded systems increasingly contain more **electronics and software**:

- Providing more **functionality** and higher **performance** at a **lower cost**;
- Providing more **safety**, requiring a rigorous engineering process;
- Providing high **reliability and trustworthiness** under all circumstances;
- Providing **flexibility, upgradeability and customisation** of the system.

The challenge is to cope with increasingly conflicting demands and growing **complexity**.

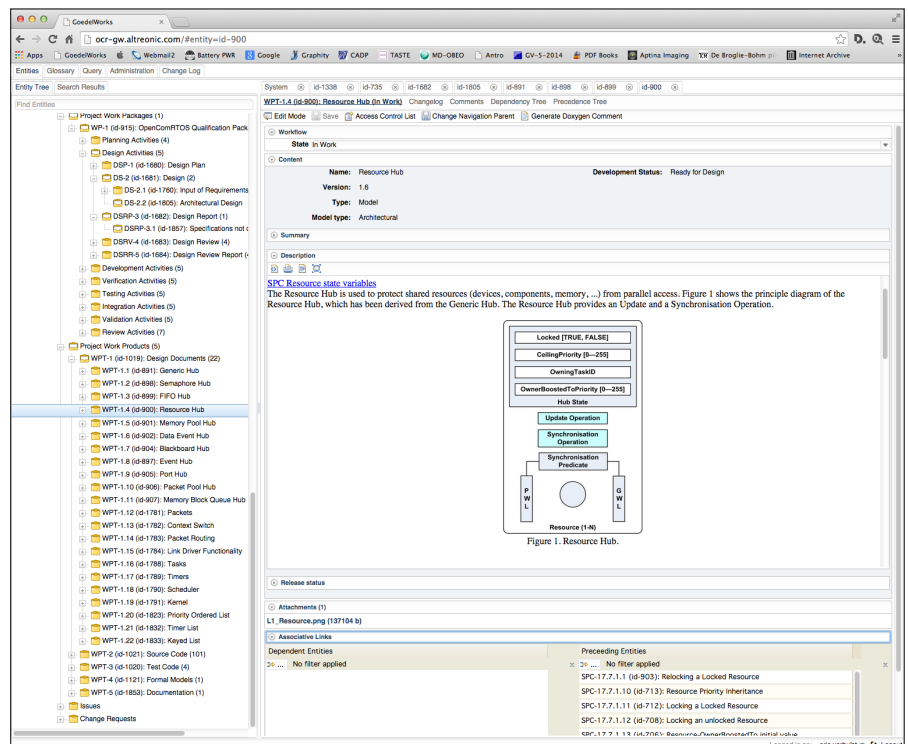
Altreonic offers a unique solution. We took a fresh look and developed a **formalized approach**. Altreonic has simplified the engineering process to a set of clearly defined and orthogonal activities. Under the banner “**unified semantics**” Altreonic’s approach assures that at any time people share their knowledge with as little misunderstanding as possible. Altreonic developed a cost-efficient framework adapted to the needs of distributed development teams.

Developed as a cloud computing SaaS application, **GoedelWorks™** offers:

- An integrated environment for systems and software engineering.
- An environment that is aware of safety engineering standards like **IEC-61508, ISO-26262, ISO-13849, ISO-25119, ISO-15998, IEC-62061, CMMI, automotive SPICE**.
- An environment capable of collecting an organization’s knowledge.
- An integrated, version managed project repository.
- An environment compatible with agile as well as traditional processes.

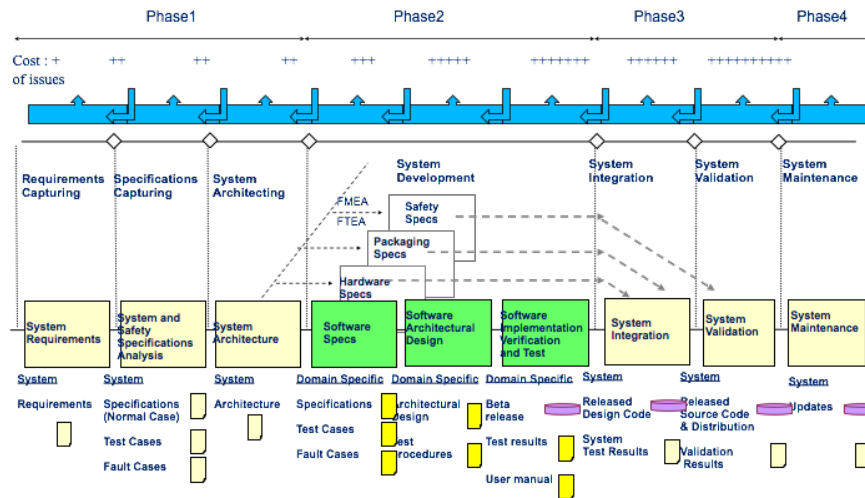
No more hassles with development tool versions and set-up, or complex IT configurations and you only pay for the resources used.

Return On Investment guaranteed.



The **GoedelWorks™** framework is web hosted, which results in a real-time specification and development repository of the system or product under development. It has iterative and evolutionary development at its core while it guides the project members to work in a consistent manner.

Every organization has a lot of heuristic know-how but often it is not recorded or applied in a consistent manner. It can take years for newcomers to absorb this knowledge. Of course, integrating this knowledge requires human



ASIL process flow identified 3500 process requirements!

interaction but Altreonic has the tools to facilitate this. The result is a development portal that allows reusing existing IP and platforms while preserving the heuristic knowledge integrated in the on-line design wizards. **GoedelWorks™** is made standards aware but it is essentially domain independent. It provides the engineering team with pre-certification support during the development of the system. It covers organisational processes, safety engineering and development processes as well as the supporting processes needed for certifiable systems engineering. In particular for software development, a direct connection with a repository like Subversion allows real-time updates of the software in the portal.

